

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-041248

(43)Date of publication of application : 13.02.2001

(51)Int.Cl.

F16C 33/32

F16C 33/34

F16C 33/62

(21)Application number : 11-217448

(71)Applicant : NSK LTD

(22)Date of filing : 30.07.1999

(72)Inventor : SHIMOKAWA TAKASHI  
NISHIMURA NOBUHIKO  
TERADA YASUHISA

## (54) ROLLING BEARING FOR FAN MOTOR

## (57)Abstract:

PROBLEM TO BE SOLVED: To allow lower noise and longer acoustic life by using as a rolling element ceramic for aiming to insulation and long life, and setting residual austenite of one or both of bearing rings to be a specific value.

SOLUTION: Main structures are inner and outer bearing rings and a plurality of rolling elements incorporated between them, the rolling elements are made of ceramic for aiming to insulation and long life, and residual austenite of one or both of the bearing rings is less than 2 capacity %. As the ceramic material, sintered silicon nitride at atmospheric pressure or by pressurization, sintered zirconia at atmospheric pressure or by pressurization, or sintered silicon carbide by pressurization is used. A fan motor for cooling an inverter power supply can prevent electrolytic corrosion caused by a carrier high frequency of the power supply in high insulation of the ceramic, eliminate occurrence of abnormal noise in a fan motor state, improve abrasion resistance, and have an acoustic life longer than the prior art. When the residual austenite is more than 2 capacity %, impulse resistance decreases.

## LEGAL STATUS

[Date of request for examination]

30.09.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office